## Co 4505 / co 5501

## $\underline{\text { PART - A }}$

Answer ALL Questions:
(10x2=20)

1. Define cost accounting?
2. State whether true or false:
a) Financial information is provided by cost accounts.
b) Sale of raw material scrap is reduced from works cost.
3. How are Overheads classified?
4. What is ABC analysis?
5. Define Labour Turn Over? State any one method of calculating labour turn over rate
6. Find out the Economic Order Quantity and the number of orders per year from the following information: Monthly consumption 3,000 units;
Cost per unit Rs.54; Ordering per unit Rs. 150 per order;
Inventory carrying cost $20 \%$ of the overage inventory.
7. In a company, weekly Minimum and Maximum consumption of material A are 25 and 75 units respectively. Re-order Quantity as fixed by the company is 300 units. The material is received within 4 to 6 weeks from issue of a supply order. Calculate Minimum level and maximum level of material A.
8. A worker is paid at 25 paise per hour for completing a work within 8 hours. If he completes the work within 6 hours, calculate his wages under Halsey plan when the rate of premium is $50 \%$. Also ascertain the effective hourly rate of earning by the worker.
9. A company produces 300 units of product R, 200 units of product ' $S$ ' and 100 units of product $\mathbf{J}$ from a single process. The costs up to the point of separation amounts to Rs. 30,000 . You are required to apportion the joint cost of production among the products, using the average unit cost method.
10. $\mathrm{S} \& \mathrm{Co}$ produces a product through 2 processes. The following details to process I are available: Input: Material (500 units) 10,000, Labour 8000, Indirect expenses 7,000, Normal loss in the process is estimated at $5 \%$ of the input which possesses a scrap value of Rs. 31 per unit. Prepare the process account.

## PART - B

Answer any FOUR Questions
$(4 \times 10=40)$
11. Explain the difference between cost accounting and financial accounting.
12. Discuss the essentials of a good wage system.
13. From the following figures prepare a reconciliation statement between cost and financial recosts

| Net profit as per financial records | $1,28,755$ |
| :--- | ---: |
| Net profit as per costing records | $1,72,400$ |
| Works overhead under-recovered in costing | 3,120 |
| Administrative overhead recovered in excess | 1,700 |
| Depreciation charged in financial records | 11,200 |
| Depreciation recovered in costing | 12,500 |
| Interest received but not included in costing | 8,000 |
| Obsolescence loss charged in financial records | 5,700 |
| Income tax provided in financial books | 40,300 |
| Bank interest credited in financial books | 750 |
| Stores adjustment (credit in financial books) | 475 |
| Depreciation of stock charged in financial books | 6,750 |

14. From the following information prepare contract account for 2009. Also show what part of the profit on the contract should be taken credit of in 2009? The contract was for Rs.8,00,000.

Materials issued from stores 1,50,000, Wages paid 2,20,000, General charges 8,000, Plant installed at site on July $1^{\text {st }} 2009$ 40, 000, Materials on hand at close 8,000, Wages accrued due 8000 , Work certified $4,00,000$, work completed but not certified 12,000 , cash received $3,00,000$, materials transferred to other contracts 8,000 , materials received from other contracts 2,000, Depreciation on plant is to be provided at $10 \%$ per annum.
15. From the following particulars, Calculate wages earned by $\mathrm{A}, \mathrm{B}, \mathrm{C}$ and D respectively under:
a. Time rate basis
b. Straight piece rate
c. Differential piece - rate of Taylor's system
d. Halsey premium plan system
e. Rowan System.

Standard time allowed - 10 units per hour Normal wage rate - Rs. 10 per hour
D S Herential rates to be applied:
$80 \%$ of Piece rate when below standard
$100 \%$ of Piece rate when equal to standard
$120 \%$ of Piece rate when above the standard
The production on a day of 8 hours
A: 75 units
B: 80 units
C: 85 units
D: 100 units.
16. Compute machine hour rate:

Cost of machine Rs. 13,500, Life of the machine 10 years, Estimated scrap value (after 10 years) Rs.1980, Working hours 1,800, Insurance (per annum) Rs.45, Cotton wastes (per annum) Rs. 75, Rent for dept. (per annum) Rs.975, Foreman's salary (per annum) RS.7,500, Lighting for dept. (per annum) Rs.360, Repairs for entire life Rs.1440. Power 10 units @ 7.5 paise per unit. Machine occupies $1 / 5$ of the area and foreman devotes $1 / 4^{\text {th }}$ of his time to the machine. The machine has two light points out of the total 12 for lighting in the department.
17. Compute cost per running kilometer form the following:

Estimated life of vehicle $1,00,000 \mathrm{kms}$. Annual running $15,000 \mathrm{kms}$.
Cost of vehicle 25,000, Road license (annual 750, Insurance (annual) 700, Garage rent (annual 900, Supervision \& salaries (annual) 2700, Drivers wages per hour 3, Cost of fuel per litre 3, Repairs and Maintenance per km 1.75, Tyre allocation per km 0.90 . Charge interest at $5 \%$ per annum on cost of vehicle. The vehicle runs 20 kms per hour on an average and one litre of fuel gives $20 \mathrm{k} . \mathrm{m}$.

## PART - C

Answer any TWO Questions
$(2 \times 20=40)$
18. Draw a stores ledger card recording the following transactions under (a) FIFO METHOD AND (B) LIFO method
1998 July 1 opening stock, 2,000 unit at Rs. 10 each

> 5 Received 1,000 units at Rs.11each
> 6 Issued 500 units
> 10 Received 5,000 units at Rs. 12 each
> 12 Received back 50 units out of the issue made on $6^{\text {th }}$ July
> 14 Issued 600 units
19. During January 1994, 200 units were introduced in process I. There was no work in progress on 1.1.94. By the end of the month 1200 units were completed and transferred to process II. 500 units were incomplete and 300 units had been scrapped. The normal process loss had been $10 \%$ of input. It was estimated that the incomplete units reached the following stage: Materials $80 \%$, Labour and overheads $60 \%$. The process costs were:

Material Rs.17,400, Labour 6,400, Overheads 3,200 Scarap value is Rs. 2 per unit. The scrapped units had passed through the process and are $100 \%$ complete as regards material, labour and overheads.

Prepare the necessary statements, process account and abnormal loss account.
20. Modern Mfrs. have three production departments P1, P2, P3 and two service departments S1 and S2, the details pertaining to which are as under:

|  | P1 | P2 | P3 | S1 | S2 |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Direct Wages | 30000 | 20000 | 30,000 | 15,000 | 5,000 |
| Working hours | 3070 | 4475 | 2,419 | - | - |
| Value of <br> Machine | 600000 | 800000 | $10,00,000$ | 50000 | 50000 |
| HP of machine | 60 |  |  |  |  |
| Light points | 100 | 30 | 50 | 10 | - |
| Floor space <br> (Sq Feet) | 20000 | 25000 | 30000 | 20000 | 5000 |

Following figures: Rent 15,000, General lighting 66,00, Indirect wages 20,000, Power 15,000, Depreciation on machines Rs.100000, sundries 10,000. The expenses of service departments are allocated as under:

|  | P1 | P2 | P3 | S1 | S2 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| S1 | $20 \%$ | $30 \%$ | $40 \%$ | - | $10 \%$ |
| S2 | $40 \%$ | $20 \%$ | $30 \%$ | $10 \%$ | - |

Find out the works cost of product which is processed for manufacturer in departments P1, P2 and P3, for 4,5 and 3 hours respectively, given that its direct material is Rs. 500 and direct labour cost is 430 .
21. The following extracts of costing information related to commodity ' A ' for the half year ending 31.12.2002.

|  | Rs. |
| :--- | ---: |
| Purchase of raw materials | $1,20,000$ |
| Work overheads | 48,000 |
| Direct wages | $1,00,000$ |
| Carriage on purchases | 1,440 |
| Stock (1 $1^{\text {st }}$ July 2002) | 20,000 |
| Raw materials | 16,000 |
| Finished products (1,000 tons) | 22,240 |
| Stock (31 st Dec. 2002) | 32,000 |
| Raw materials |  |
| Finished products (2,000 tons) | 4,800 |
| Work-in progress (1 ${ }^{\text {st }}$ July 2002 | 16,000 |
| Work-in progress (31 ${ }^{\text {st }}$ Dec. 2002 | $3,00,000$ |
| Sales - Finished products |  |
|  |  |

Selling and distribution overheads are Re. 1 per ton sold. 16,000 tons of commodity were produced during the period.
You are to ascertain (a) cost of raw materials used (b) cost of output for the period (c) cost of sales (d) Net profit for the period and (e) net profit per ton of the commodity.

